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Frost Losses Figured at 482 Million Dollars

2-Way Trade $1.1 Billion

1953 Figures Show Brazil & U. S. Exceed $Billion in Trade, for 7th Year

Two-way trade between Brazil and the United States for 1953 totaled $1,157 milion, for the seventh straight year of better than a billion dollar trade between the two countries.

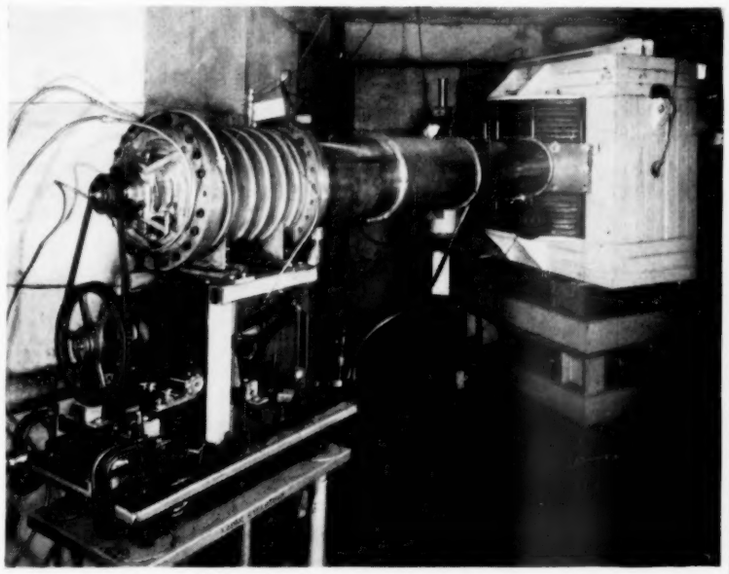
U. S exports, according to Brazilian Treasury Delegation figures, were $389 million, while U.S. imports, as shown by recently-released statistics, were $768 million.

Brazil's favorable trade balance appears on paper at $380 million. This figure, however, does not take invisible imports, especially dividend and profit remittances on the billion-dollar total of U. S. investments, which, for 1952, earned $148 million.

The wide gap between the two figures is also largely a result of Brazil's "belt-tightening policy", adopted by the Vargas administration to settle the backlog, resulting partly from heavy dollar expenditures on wheat, in the face of previous crop failures in soft currency areas. (For news on Brazil's domestic wheat drive, see page 5).

An appraisal of U. S. investments in Brazil, and the outlook for trade between the two countries, scheduled to be presented on March 16 in New York by H. E. Ambassador João Carlos Muniz, will be reported in our next issue.

Brazil's Synchro-Cyclotron



Seen set up for trials in the University of Chicago is the 21-inch synchro-cyclotron built for the National Research Council of Brazil, headed by Admiral Alvaro Alberto. The cyclotron, which has already arrived in Rio de Janeiro, will be set up at Niteroi (State of Rio) in the Brazilian Physical Research Center, which operates under the auspices of the National Research Council.

International Bank Loans $18 Million for S. Paulo Power Plant

Brazilian Gov't. Guarantees Credit for Piratininga 200,000 kW Unit

The International Bank for Reconstruction and Development has granted a loan of $18,790,000 to the Brazilian Traction, Light & Power Company, guaranteed by the Government of Brazil, to help finance the construction of a thermal electric power plant at Piratininga, near the city of São Paulo.

The loan, formally concluded end February, was signed, on behalf of the Brazilian Government, by Dr. Mário da Câmara, head of the Brazilian Treasury Delegation in New York.

Mr. E. C. Fox, Senior Vice President, signed for the Brazilian Traction Light & Power Company, and Mr. Robert L. Garner, Vice President, signed for the International Bank.

The 200,000 kilowatt Piratininga plant was commended in 1952, as a first step in the São Paulo Light program aimed at doubling existing capacity of 600,000 kilowatts by 1956.

(*See page 2*)

Expert Gives Coffee Data

Horácio Cintra-Leite, of Brazilian Coffee Inst. Testifies on Damage

Dollar loss to Brazil, as a result of widespread damage to coffee trees during the July frosts, in terms of loss of exportable production, has been estimated at $173,938,000, for the 1953-1954 crop, by Horácio Cintra-Leite, Representative in the U. S. of the Brazilian Coffee Institute.

Furthermore, Mr. Cintra-Leite has declared, the probable loss in exportable production, for the 1954-1955 crop year, can be estimated at $308,412,000. This would give an over-all total loss for the two crop years of $482,350,000.

Both these estimates, presented by the Brazilian coffee expert in the course of a statement before the Special Sub-Committee on Coffee Prices of the Senate Committee on Banking and Currency, are based on the F.O.B. average price per bag at port of embarkation in 1953, which was $59.31.

Mr. Cintra-Leite placed total losses from this year's Brazilian crop at 2,932,700 bags, and those for the 1954-1955 crop year at 5.2 million bags, due to the long-range effects of destruction of trees.

Regarding the scene of damage itself, he quoted a special dispatch from Santos on February 9th, by New York Times correspondent Sam Pope Brewer, stating "A low flight over the frostbitten areas gives a first impression of damage. For miles, the plane passes over rolling hillsides, covered with a neat geometrical design of little

(*See page 2*)

Brazil Backs $18 Million Loan for São Paulo Power

Internat'l Bank Finances Project

Brazilian Traction Gets Developmental Credit for Piratininga

(*From page* 1)

The Piratininga plant is scheduled for completion by the latter part of 1954, total cost of the project being estimated at $35 million.

The Bank's loan of $18,790,000 will pay for the imported equipment needed for the plant, while Brazilian Traction will meet the remaining cost out of its own resources.

The loan, for a period of twenty years, bears interest at a rate of 4⅞ per cent, including the 1 per cent commission which will be allocated to the bank's special reserve. Amortization will begin September 1, 1955.

The Piratininga plant is designed to tie in with the hydro-electric plants supplying the remainder of São Paulo power, and to offset adverse effects of drought on hydro-electric supplies.

Other Developments

Meanwhile, work is advancing on the new underground Cubatão hydro-electric plant, which is to have a total of six 65,000-kilowatt generators, for an aggregate output of 390,000 kilowatts.

Another project well under way, and due to supply a total of 330,000 kilowatts to the Rio de Janeiro-São Paulo network, is the Forçacava hydro-electric station, utilizing the waters of the Paraíba and Piraí rivers.

The first two generators of this plant were placed in service end 1953.

The Piratininga plant will be equipped with turbo-generators designed for a strangulation pressure of over 800 pounds per square inch, at a temperature of over 1050 degrees. It has previously been announced that the plant, designed to use Venezuelan bunker C type oil at the outset, can later be switched to pulverized coal.

Frost Losses Set at $ Half Billion

(*From page* 1)

green tufts like a chenille carpet Suddenly the carpet changes from healthy green to the color of burlap—that has been frozen—and in places for miles the whole landscape is like that."

Commenting on these impressions by the American correspondent, Cintra-Leite added: "If devastation such as this had struck in some area of the United States, the newspapers, radio and television immediately would have been full of it. There would have been pictures of desolated farms, human interest stories of the hardships of individual farmers, and feature stories recording all details of the wantonness of Nature. But this destruction occurred in Brazil, 5,000 miles away—and it is only human nature to be unmoved by something that doesn't physically and visibly touch us or our immediate families or friends,

Stating that "it is important that the coffee consumers in the United States know the truth" about the supply and price situation on coffee, the Brazilian coffeeman cited a Department of State memorandum of January 20, 1954, in the following terms:

"The Department of State has no information which would suggest that the recent increase in coffee prices results from anything other than a strong demand operating against a limited supply through normal market forces." Later, the same memorandum was cited as stating:

"In July and August, 1953, frost severely damaged millions of coffee trees of São Paulo and Paraná sections of Brazil which is still the world's largest source of coffee. The full effect of the frost on prospective supplies has only recently become apparent. The effect on price is pronounced because the frost loss comes on top of an already tight supply situation."

Mr. Cintra-Leite also quoted from the Foreign Agriculture Circular of the Foreign Agriculture Relations Office, United States Department of Commerce, for December 2, 1953, as follows:

"The frost damage in Paraná now appears to be quite serious, in that the trunks and limbs of the trees were more heavily damaged than earlier reports indicated. Most of the heavily damaged trees are putting out new shoots only at the base of the tree. The tops of many of the trees are dead. The trees that appear less heavily damaged lost much of the new growth at the ends of the limbs and flowering on these trees has been a disappointment.

"The supply situation in Brazil is expected to be relatively right, with high prices over the next three seasons. In the two-year production cycle of the coffee trees, 1954 is a big year in the western part of the coffee belt, and the small crop for the eastern area. Although new trees coming into production in northern Paraná will help bring up the production, a large crop equal to the 5,000,000 bags of 1952 cannot be expected out of northern Paraná before the 1956 harvest. Production of any significance from the southern Mato Grosso and Goiaz areas cannot be expected for a number of years. Brazil is developing plans to stop the decline of coffee production in the older coffee areas by increased use of irrigation, fertilizers, higher-yielding varieties and improved cultural methods. The Federal Government also plans to assist in the combatting of the broca in the eastern coffee belt."

HIGH WOOL EXPORTS FOR 1953 NOTED

Brazil exported 20.6 million pounds of wool during the first eleven months of 1953. Shipments were valued at Cr$469 million or about $23 million.

Largest importer was Japan, which took more than 15 million pounds.

TRANSFER OF TELEPHONE COMPANY IS APPROVED

The Canadian Parliament is reported to have approved, in principle, a bill providing for the transfer of the main office of "Companhia Telefônica do Brasil" from Toronto to São Paulo.

São Paulo Pushes Soil Conservation

"World Foremost Authority" Is in Brazil to Assist Start of Program

The State of São Paulo has organized a technical soil conservation program, and is being assisted in its organizational phases by a U.S. technician considered "the world's foremost authority" in this branch of activity, it is disclosed.

The expert, Professor Hugh Bennett, former director of the U.S. Soil Conservation Service, arrived in São Paulo late in February, at the invitation of Mr. Renato Costa Lima, state Secretary of Agriculture, and plans to spend about two months in Brazil.

Professor Bennett will direct the initial phases of the soil conservation plan, to be carried out at Fazenda Mato Dentro, in Campinas, on an experimental station of São Paulo's Agronomical Institute.

The plan, drawn up by soil conservation experts of the State Agronomical Institute and the Agricultural Engineering and Mechanics Department, contains three main phases, namely:

Phases of Program

1) compilation of statistics on all pertinent soil features, including slope, existing degree of erosion, precipitation figures and existing use to which land is put;

2) classification of soils in accordance with their utilization factors;

3) road and highway planning.

The anti-erosion and soil conservation campaign is a major program of the Agronomical Institute of São Paulo, premier agriculture state of Brazil, and largest producer of the country's three most important products: coffee, cotton and sugar, as well as rice and peanuts.

Professor Hugh Bennett was quoted by the Brazilian press as describing the Agronomical Institute as "one of the best I have seen in any part of the world."

P. Afonso Power Will Spark N-E Brazil Economy

First Stage of Project Nears End. Early Start on Second Stage Seen

Gov't. of Pernambuco Offers "Full Assistance" for Investors in Area

The São Francisco Hydro-electric Company, now in the final stages of construction of the first stage of its giant Paulo Afonso power project, plans to start construction of the second stage immediately, it was recently disclosed.

The first stage comprised two 60,000-kilowatt generators, due to start supplying power to the cities of Salvador and Recife within the next few months, while the second stage will provide for a further 60,000 kilowatts, by means of a third generator.

Assistance to Capital

Meanwhile, the State government of Pernambuco, preparing broad plans for intensive industrialization of the region, has announced that it is prepared to provide "full assistance" to both Brazilian and foreign capital investors planning expansion in the State.

Among the general benefits accruing to the entire region, as indicated by the hydro-electric company are: progressive increase in industrialization of the entire São Francisco valley; stepping-up of irrigation developments, improvement in farming and the standard of living of the population in the entire area.

Details of Network

The initial network of the Paulo Afonso project consists of two 220,000-volt trunk lines, with a total length of nearly 900 kilometers, linking the power station with the cities of Recife and Salvador, and already completed; a frequency conversion station in Recife (Recife current is at 50 cycles, whereas Salvador current is 60 cycle), 525 kilometers of sub-transmission lines at 66,000 volts and 765 kilomters of sub-transmission lines at 33,000 volts. The 66,000-volt lines will have ten step-down transformer stations, and the 33,000-volt lines, 39 step-down stations.

By 1955, it is stated, no less than thirty-nine towns and cities in the region will be receiving Paulo Afonso current.

Huge Population Sector

Ultimately, the network will include some 200 population centers, and cover a region inhabited by eleven millions, or about 20 per cent of the entire Brazilian population.

This region, though previously lagging in industrial development, due to lack of power and adverse climatic factors, is now likely to achieve speedy development, not only as a result of the coming availability of abundant power, but also through the financial resources which will be made available for productive enterprises through the North-East Bank, launched August last.

Investment Structure

This Bank, organized with a capital of Cr$100 millions, will avail of budgetary assignments expected to total Cr$1.5 billion during a five year period.

Total investment programs for the region totaling about Cr$3 million, were outlined by President Getúlio Vargas in his speech of presentation of the Bank.

Main purposes of the investment to be channeled into the area, he explained, were colonization and settlement of the region, and development of railroads.

Railroads Stressed

"One of the basic requirements of progress in the North-East of Brazil," President Vargas stated at the time, "is the rehabilitation of railroads throughout the region, and their coordination into three great systems."

Specific action to be taken in the area was outlined by Joint-Commission Project No. 30, under the terms of which a series of ten railroads would be consolidated into three groups, one with headquarters in Fortaleza, Ceará, one based on Recife, Pernambuco, and one on Salvador, Bahia.

The fact that these cities all lie in the supply perimeter of Paulo Afonso power points to a brilliant future for transport in the entire region.

"In this area," the Brazilian press commented recently, "one of the best integrated railroad systems in Brazil is rapidly taking shape."

Value of Region

"My government is convinced that the North-East . . . may become a region of exceptional productivity and a considerable source of foreign currency earnings," stated President Vargas, when inaugurating the North-East Bank.

A glance at the general resources of the region shows the background that prompted this remark.

Mineral, Vegetal Riches

It is extremely rich in minerals such as mica, bauxite, tungsten ore, iron ore, copper ore and limestone, for the study of which a special fund equivalent to more than $1 million is now being applied by the Brazilian government.

Prominent among the vegetal resources are the huge sisal plantations which in 1951 and 1952 earned Brazil over $25 million from exports to the U.S.

Textile Center

The chief industry at present operating in the region is textile manufacture. However, among the economic possibilities of the region, which were investigated at a round-table meeting of the São Francisco Hydro-electric Power Company, late in 1952, were:

New Industries Suggested

Development of the sugar, wood pulp and paper industries;

Organization of a canning and fresh fish industry on the São Francisco river;

Establishment of a fertilizer industry in the Paulo Afonso region, with special emphasis on Pernambuco phosphate rock and apatite from Bahia, Alagoas and Paraiba.

Utilization of iron ore from the Santa Fé Mines, manganese from the Jacobina and Bomfim mines in the State of Bahia;

Production of pig iron, steel and iron alloys, application of Paraiba copper ores, extraction of chrome from Campo Formoso and Santa Luzia.

Development of a salt industry in Sergipe, with production of electrolytic soda and chlorine.

Expansion of the Alagoas and Sergipe textile industry.

Sea Fishing Opportunity

In addition to the above sectors of activity, worthy of study as a field of application for long-range capital investment, mention should be made of the prospects for developing and expanding the sea fishing industry.

A basic requirement of sea fisheries, especially in the tropical climate such as that prevailing in the North-East of Brazil, is ready availability of refrigeration to preserve the catch.

Refrigerated Stations

With Paulo Afonso power, refrigerated stations could easily be established at many points along the coast, and full advantage could be taken of the abundant shoals of fish with which these waters teem.

Year-Round Possibilities

A point of particular interest in this respect is the possibility of fishing on a year-around basis, due to the warm climate, to the contrary of conditions prevailing in more northerly or southerly regions.

Useful Development

Non-availability of refrigeratoin facilities aboard the small vessels which at present largely compose the Brazilian fishing fleet (now slated for rapid modernization with government assistance) could be overcome, according to advices published in the Brazilian press, through utilization of a new technique for fish preservation in ice-cooled sea water with a small percentage of aureomycin, developed and studied by Lederle Laboratories Division of American Cyanamid Company.

Cr$900 MILLION RAILROAD LOANS ARE APPROVED

President Getúlio Vargas has approved a project authorizing the Goiás and Paraná-Santa Catarina railroads to contract loans of approximately Cr$900 millon with the National Economic Development Bank for their complete re-equipment.

NORTH-EAST FERTILIZER FACTORY IS PONDERED

Brazil's Ministry of Agriculture is considering the possibility of setting up a fertilizer factory in the North-East, it is disclosed.

Two Norwegian specialists, Da. M. P. T. Fjellanger and Dr. T. Simonsen, have been engaged for technical studies on the project.

They have recommended that the plant be located at Olinda, in Pernambuco, instead of at Paulo Afonso, as had previously been suggested, in view of the more centralized situation of the former. (Olinda is the site of large natural phosphate beds).

BRAZILIAN AIRLINE WILL LINK SAO PAULO WITH TOKYO

The Brazilian "R.E.A.L." airline has disclosed that it hopes to inaugurate an air route shortly between São Paulo and Tokyo, with stops at Manáus, San Francisco, Honolulu and Wake Island. Trips would be made weekly, using DC-6 airliners.

LE TOURNEAU WILL MANUFACTURE IN BRAZIL

The le Tourneau-Westinghouse Company is reported to have purchased land near Campinas, in the State of São Paulo, for the installation of a factory to produce parts and accessories for earth moving equipment.

ERIC JOHNSTON IS AWARDED CRUZEIRO DO SUL DECORATION

Mr. Eric Johnston, president of the Motion Picture Association of America, has been awarded the order of the Cruzeiro do Sul by the Brazilian Government. Besides holding several high-level government posts, Mr. Johnston was formerly thrice president of the Chamber of Commerce of the United States.

Brazilian News and Notes

NATIONAL AMAZON RESEARCH INSTITUTE IS ESTABLISHED

President Getúlio Vargas has signed a decree establishing the National Amazon Research Institute, it is disclosed. Purpose of the new Institute will be do scientific and technological research in regard to the physical and living conditions of the region, with a view to improving such conditions to the benefit of the "culture, economy and national security" of the region.

The Institute, which is under the control of the National Research Council, will have its headquarters in the city of Manaus, the State capital.

It will carry out research projects under its own initiative, and will also encourage the training of research workers and experts on the Amazon region, by means of study grants and scholarships.

It is to operate in permanent liaison with the Superintendency of the Amazon Economic Valorization Plan.

OFFICIAL "CAFEZINHO" PRICE BOOSTED 100% IN SAO PAULO

Echoes of extensive crop losses due to the July frosts were visible in the recent decision of the São Paulo Price Control Commission to set a Cr$1.00 ceiling price on the "Cafézinho" (steaming hot coffee served in cafés and restaurants throughout Brazil in a cup smaller than U.S. demi-tasse).

Only a few months before, ceiling price for the same "Cafézinho" had been only Cr$0.50 (fifty centavos) or just half the present figure.

Anxious housewives in this country, prodded by harsh remarks in the press about coffee prices, can take consolation from the fact that, at official exchange rates, one cruzeiro is equivalent to about five cents . . . for a cup of coffee equivalent to about a quarter of the standard U.S. breakfast cup, though considerably stronger than the average U.S. coffee brew.

CURITIBA-PARANAGUA PIPELINE STUDIED

A pipeline committee is studying the possibility of constructing a pipeline between the port of Paranaguá, and the city of Curitiba, it is disclosed.

Colonel Artur Levy, President of the committee, and assistant engineers Leopoldo Miguez and Paulo Carneiro recently reported to Dr. Francisco Bento Munhoz da Rocha, Governor of the State of Paraná, on the project.

Pipelines have so far been constructed in Brazil between Santos and São Paulo, and between the Candeias oilfield and the Mataripe refinery, in the State of Bahia.

KING RANCH EXPANDS OPERATIONS IN BRAZIL

The King Ranch of Texas, largest cattle empire in the world, has expanded its operations to Brazil, with the shipment of 372 head of Santa Gertrudis cattle, which will be installed on a range some 300 miles West of São Paulo.

The Brazilian venture, of which International Packers, Ltd., a Swift affiliate, is a partner, is the third overseas operation for King Ranch Corporation, which two years ago began ranching in Australia and Cuba.

LARGE GEAR FACTORY NEARS CONCLUSION IN SANTA CATARINA

Scheduled to produce 2,000 tons a month of automobile, truck and tractor gearbox and transmission gears is a new factory built by the "FANESA" organization in Brazil's southern state of Santa Catarina.

The factory, which will operate with machinery imported from the U.S.A. and Switzerland including precision grinders, milling machines and lathes, will provide work for 300 skilled machine-shop workers at the outset, it is reported.

(The auto parts industry in Brazil is highly developed; the upwards of four hundred industries engaged in it are estimated to provide the country with an exchange saving of more than $50 millions annually, through avoidance of otherwise necessary imports.)

ATOM ORE CONVERSION UNITS PLANNED

Brazil is studying the location and construction of her first atomic ore conversion units, it was recently disclosed.

The plants will employ chemical processes to extract from Brazilian ores metallic uranium of nuclear purity.

Appointed by President Getúlio Vargas to head the Committee studying uranium ore conversion plant projects is Professor Francisco João Maffei, Member of the National Research Council of Brazil and Superintendent of the Institute of Technological Research of São Paulo.

Brazil's nuclear program, spearheaded by the National Research Council, under the vigorous leadership of Admiral Alvaro Alberto, is largely aimed at industrial development of atomic power, a working possibility in the nuclear mineral-rich country. (For another aspect of the program, please see photo on page 1).

HIGH-YIELD STRAINS OF SUGAR ARE OBTAINED

Certain varieties of sugar cane obtained by the Experimental Station, in the city of Campos, state of Rio, have show yields higher than the best Java and India types introduced into Brazil.

The Experimental Station has been making tests aimed at improving strains originally brought from abroad, whose yield is now diminishing.

RIO-NITEROI TUNNEL APPRAISED AT $80 MILLIONS

A number of U.S. engineering firms have displayed interest in securing the contract to construct the Rio-Niteroi tunnel, a member of the tunnel commission revealed to the Brazilian press.

Cost of the tunnel, it was added, will vary between 70 and 80 million dollars and, depending upon the condition of the ocean bed, will take from three to five years to complete.

The tunnel, would be about as long as New York's Lincoln Tunnel, it has been unofficially estimated.

Million-Ton 1954 Wheat Crop is Aim of Brazil

Cr$168 Million Investment in Seeds, Fertilizers and Machinery is Slated

Seeks 22% Rise Over the 821,877 Tons Obtained During 1953 Crop

Brazil intends to achieve a wheat crop of one million tons in 1954, and plans to invest Cr$168 millions (about $8 million) in mechanization and other procedures for this purpose, it was recently disclosed.

This would be a boost of about 178,000 tons or nearly 22 percent, over the 1953 crop figure of 821,877 tons.

Wheat production in Brazil has been sharply boosted in recent years, in line with government directives. As late as 1951, total commercial crop was only 270,000 tons.

Under the 1954 plans, a total of 38,200 tons of fertilizers have already been purchased at a cost of Cr$60 millions by the Ministry of Agriculture, which will also invest Cr$20 million in seeds, and Cr$80 million in agricultural machinery, especially tractors and combines.

Chief wheat-producing state is Rio Grande do Sul, followed by Santa Catarina and Paraná, though wheat-growing is also being developed in several other states, including parts of São Paulo, Minas Gerais (especially in the Patos region) Mato Grosso, Goiás and even Bahia.

70 Percent Boost

Typical of the rapid development now being noted is a report to the effect that the Santa Catarina crop rose from 110,000 tons, for the 1951-1952 season, to 190,000 tons for the 1952-1953 season.

Rio Grande do Sul's 1952 production was about 450,000 tons, and plans call for a production of one million tons a year from this state alone to be achieved as early as 1960.

Brazil's Technical Commission on Wheat finds the following factors have been mainly responsible for the increase in production of wheat in Brazil:

5-Fold Program

a) the floor price policy and regulations providing for purchase of Brazilian wheat by the flour mills;

b) the construction of a network of warehouses and elevators;

c) the intensification of agronomical measures, such as the use of special fertilizers and of new varieties of seed developed in the official government laboratories;

d) distribution and financing of agricultural machinery, and

e) the unification of wheat-cultivating plans throughout Brazil, as a result of the periodical meetings of the Technical Committee on Wheat.

The whole of these measures are aimed at increased productivity, reflected in lower costs, so as to place wheat production in Brazil on a parity basis with the international wheat price, a basic requirement for the expansion of wheat-growing in Brazil.

Important Sector

Brazil, whose consumption of wheat now approaches 1.8 million tons yearly, views in this expansion program one of the most important sectors of its exchange-saving program, ranking along with selective industrialization in the drive to cut down on expenditures in foreign currencies.

Of great value in this connection was the recently-approved $18 million developmental loan granted by the International Bank for Reconstruction and Development.

This will be used not only to aid imports of farming machinery but also to assist in the construction of a network of warehouses and elevators.

Warehouse Network

Estimated cost of these warehouses had been announced last year as over $4 million, plus Cr$207 million (or about $10 million) in Brazilian currency.

The biggest warehouse provided for under the network project is that for the port of Rio Grande, for a planned capacity of 23,258 tons.

Pôrto Alegre would have a 12,000-ton warehouse, and Erechim, scene of Brazil's annual (November) Wheat Festival, one with a capacity of 10,000 tons.

The remaining units are to be located in Passo Fundo, Carazinho, Blau Nunes, Cruz Alta, Bento Gonçalves, Júlio de Castilhos, Cachoeira do Sul and Bagé.

All these points are located in the state of Rio Grande do Sul; further networks are to be established in Paraná and Santa Catarina.

Bulk-Handling Plans

Bulk grain-handling facilities are being built at the port of Rio Grande and Pôrto Alegre, bringing these exporting points into line with the facilities available at importing ports such as Santos, Rio, Recife and Belém.

Development of new, high production strains of wheat in Brazil, especially at the experimental station at Bagé, has been underway for many years now.

New Strains Obtained

Especially well-known to wheat farmers in many different countries are Bagé's "Surpresa" and "Fronteira" strains.

These types have been tested at Beltsville, Md., and were also studied by the Guatemalan government, which is reported to have found them superior to 250 other types.

These Brazilian strains yield over 2,400 pounds per acre, according to published figures; next best results achieved with other strains of wheat were about 2,200 pounds.

Government Measures

Among other measures assisting agricultural development in Brazil are the recently-established crop insurance plan, announced by President Getúlio Vargas in January, the measures for producing farm tractors at the National Motor Factor, near the city of Rio de Janeiro, (plans call for 80% local manufacture within two years), and highway network developments to speed transport to shipping ports and consuming markets, (such as the so-called "Wheat Road", linking Chapecó, in the heart of the Santa Catarina growing region, with the ports of São Francisco, Itajaí and Florianópolis.

Even the question of bagging has received close attention from the government and private enterprise.

Sacking Industry

Jute growing is now a flourishing activity in the Amazon, and a vast step forward in industrialization was announced late last year, with the setting up of one of the largest sacking plants in all Brazil, at Vitória, capital of the State of Espírito Santo.

The new factory will have a production of 2,500,000 bags a year.

What the drive to produce more wheat in Brazil will mean for the country's progress and economic independence can readily be understood from Bank of Brazil statistics on the cost of wheat imports for 1952 (last year for which total figures have been released).

Cost of Wheat Imports

These statistics show that, in that year, the country spent Cr$2.4 billions, or about $120 millions, on wheat imports, or roughly seven percent more than the Cr$2.25 billions spent on gasoline imports.

Development of wheat cultivation is also an important step forward in mechanized farming, as compared to other types of culture worked by more largely manual methods.

AFRICAN SISAL PRODUCTION METHODS STUDIED BY BRAZIL

President Getúlio Vargas has appointed a Brazilian expert to study the cultivation and industrialization of sisal fibers in British West Africa. Sisal, which grows widely in the North-East of Brazil, is a preferred hard fiber for manufacture of cordage. In 1951, Brazil was the largest supplier of the U.S. market for sisal, with shipments valued at over $16 million.

Steel Output Up 2800% in 20 Years, Vargas Shows

New Volta Redonda Blast Furnace Will Save Country $26 Million Yearly

President Predicts 2.5 Million Ton a Year Production Soon

Brazil increased her production of pig iron twenty times, and steel production 28 times, over the twenty-year-period from 1931 to 1951, and looks forward to having a production capacity of 2.5 million tons within the not far distant future, President Getúlio Vargas disclosed in an address given at the inauguration of Volta Redonda's new, modern second blast furnace on February 20 last.

Economic Significance

The Brazilian Chief Executive also stressed the exchange-saving value of the new blast furnace, and pointed out that, though it had involved an expenditure of $25 million and Cr$500 million in Brazilian currency, it would provide economies in Brazil's importing budget of as much as $25 million yearly.

He drew a graphic picture of Brazil's progress in the iron and steel field since the beginning of his first administration, and stressed the successful outcome of a series of long-term government measures taken at that time to aid and encourage the iron and steel industry.

Other Developments Cited

Though Volta Redonda is Brazil's (and Latin America's) largest steel mill, note was also taken of five other large-scale iron and steel developments now in their final stages or in advanced phases of planning, with a total capacity of about 640,000 tons yearly.

Sparks Heavy Industry

General Sylvio Raulino de Oliveira, president of the National Steel Company, in a speech welcoming President Vargas, drew the attention of his audience to Volta Redonda's vital rôle in sparking the growth of heavy industry in Brazil, and encouraging the development of many other industries especially in the chemical and pharmaceutical field.

Significant passages from the two speeches follow:

President Vargas Speaks

"Once again I derive from the contemplation of this portentous development, ... that same stimulation and confidence in the future of Brazil that the spectacle of Volta Redonda constantly renews in me.

"The success of this undertaking in the field of heavy industry emboldens our pride in the growth of Brazil and its increasing economic independence.

"The conclusion of the first expansion program of this mighty project is truly a triumph.

Monument Inaugurated

"It was in a spirit of justice on your part that you decided to mark this auspicious day by laying the foundation stone of the Monument to the Creator of Volta Redonda (statue of President Getúlio Vargas, commemorating his establishment of the steel mill during his first administration) to mark my earnest efforts in founding and my faith in executing this outstanding project, which is, above all, a product of your own efforts.

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"I see in this gesture that you, the workers of Volta Redonda, have sought to give concrete recognition to one glory that I claim for my administration, . . . that of having been the true founder of the steel industry in Brazil.

"Up to 1930, the steel industry was practically non-existent in this country.

"Isolated and precarious efforts on the part of private enterprise were not able to achieve more than a strictly limited production, with spare and merely secondary results.

"Nonetheless, proper credit should be given to these undertakings which showed the clear-sighted concept of the pioneers in relation to the future possibilities of Brazil, and the utilization of our inexhaustible reserves of iron ore.

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"The Work of the 1931 Military Commission, the National Steel Committee, the Executive Committee for the National Steel Plan were the first steps taken in planning for the future in this basic sector of Brazil's economy.

Positive Measures

"These studies were followed by positive measures, . . . including the prohibition of scrap iron exports, and the regulations governing the export of ores, and a basis was thus provided for the great steel industry enterprises which lay ahead.

"Availing of the incentive provided by the government for basic industry, and of the construction of the Santa Bárbara line, which conected the Central do Brasil railway with the former Vitória-Minas railroad, today the Vale do Rio Dôce, the Companhia Belgo-Mineira commenced construction of the Monlevade Steel Mill.

"But it was not until 1941, when Companhia Siderurgica Nacional (National Steel Company, operating Volta Redonda) was set up that we entered into the real heavy steel and metallurgical coke phase.

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"From that time on, progress has been staggeringly fast. In twenty years, from 1931 to 1951, pig iron production increased 20 times, and ingot steel production, 28 times.

"Volta Redonda is now concluding its First Expansion Plan, which will raise steel ingot production capacity to 710,000 tons a year. A new increase is now scheduled, which will provide a further boost, to one million tons a year.

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"Private enterprise is also active in this field, Acesita (Companhia de Aços Especiais Itabira) will soon have its production capacity stepped up to 125,000 tons a year of high quality special steels;

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2.5 Million Tons Ahead

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"In simple terms, the extraordinary achievement of Brazil can thus be expressed: In but twenty years we have fully attained self sufficiency in regard to the supplying of the internal market with iron, steel and manufactured iron and steel products.

"Without underestimating the encouraging results achieved by other steel mills, we can proclaim in full justice that Volta Redonda has played the outstanding and decisive rôle in this economic revolution.

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"Hence the very special importance that attaches to the inauguration of the second blast furnace of Companhia Siderúrgica

Nacional, one of the largest and most modern units in the world.

"The $25 million spent in its purchase and the Cr$500 million invested in its construction and assembly will be amply recompensed by increased production.

"In foreign exchange alone this will amount to a saving of $26 million a year for Brazil.

"The two victories here achieved are largely due to the enlightened administration, technical vision and tireless efforts of General Silvio Raulino de Oliveira, a worthy successor (as company president) to General Edmundo de Macedo Soares, who rendered to Volta Redonda such signal services.

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General Silvio Raulino de Oliveira, in his speech welcoming President Vargas, drew attention to the fact that during the period of less than seven years since the first pig iron ran from Blast Furnace No. 1, Volta Redonda has delivered to Brazilian factories more than a million and a half tons of finished steel products, including tens of thousands of rails (supplied to every railroad in the country), and the first galvanized steel sheets produced in Brazil.

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He referred to the development of Volta Redonda as "one of the most important chapters in the economic history of Brazil," and told his listeners that the steel industry had played an outstanding part in Brazil's rapid rate of economic development "faster than that of any other country in Latin America."

"Over the five-year period 1948-1952," General Raulino de Oliveira declared, "the average annual rate of increase of production has been higher than the rate of increase of population, showing definite progress in increase of income as well as in the expansion of other factors of production, capital accumulation, investments and the average rate of consumption.

"Paralleling this, we observe a greater proportional contribution by the transformation industries, and a substantial increase in the industrial labor force.

"One of the most noteworthy aspects of the great economic development of Brazil is the modification in the structure of the industrial economy.

Shift to Heavy Industry

"Light industry, which predominated from the beginning of this century until 1950, from that time onward began to give ground before the rise of heavy industry.

"Since 1946, when Volta Redonda started to operate, until today, statistics have reflected the greater speed of growth of the metallurgical and machinery industries, a growth surpassed only by that of the rubber products industry.

Aids Investments

"Volta Redonda, the first plant in Brazil to reduce iron ore with metallurgical coke, provided added stimulus to the coal mining industry, in addition to providing encouragement to the chemical and pharmaceutical industries, causing a change-over in Brazil's industrial course, and leading to the rise of a greater percentage of industries based on Brazilian production.

"This fact demonstrates that the Brazilian economy, is gradually incorporating into its industrial structure the greater availabilities of steel.

"This increase in internal steel production, strongly influenced by Volta Redonda," the Brazilian steel man pointed out, had offset Brazil's decrease in capacity to import.

Improvements Incorporated

Technicians point out that the experience obtained in the operation of Blast furnace No. 1 led to considerable improvements in the design of the second unit, added to the progress made in the steel industry in the meantime.

Blast furnace No. 2 can operate at high pressure at the very top of the furnace, it is stated; this is a technical improvement which could not be introduced into the first unit, as this novelty in the design of blast furnaces has been perfected only in the past few years.

One of the main features of the second Volta Redonda blast furnace is that it was constructed from steel made by the factory's own first unit.

Structures Plant Aids

A high percentage of the parts used in concluding the furnace was supplied by the structures plant, which commenced operations last August and is now producing about one thousand tons a month of structural parts of all types.

This plant is destined to play an important part, in its future expanded phases, in civil engineering and construction of skyscrapers, by providing means of cutting down on the consumption of cement, by substitution of reinforced concrete techniques by welding techniques.

Complex Unit

The complete No. 2 blast furnace unit includes the run-off section, the winch-house, a battery of bins, a tipping loader and loading ramp, three regenerative air-heaters, dust-collector, gas washing devices, etc.

Thickening System

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This blast furnace will not operate at full capacity until the completion of the second stage expansion, as the combined production of the two blast furnaces will be adequate to supply a full quota of pig iron to the open hearth furnaces.

Open Hearth Plans

At present, Volta Redonda has four of these open hearth furnaces, but two more are scheduled to be placed in operation soon, and a further two or three will follow, under the "Million Plan", to bring the overall total up to eight or nine.

Huge Water Supply

Among other secondary units which underwent expansion to meet the requirements of the expansion plan is the water treatment plant, which now has capacity for handling 650 million liters of water a day, about 50 percent above the daily consumption of the city of Rio de Janeiro, with about 2.6 million inhabitants.

Brazil Jeep-type Invention Shown

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President Getúlio Vargas has requested Admiral Ernani do Amaral Peixoto, Governor of the state of Rio de Janeiro, to provide the inventor with financial and technical assistance with a view to industrial production of the vehicle.

Steel Output Up 2800% in 20 Years, Vargas Shows

New Volta Redonda Blast Furnace Will Save Country $26 Million Yearly

President Predicts 2.5 Million Ton a Year Production Soon

Brazil increased her production of pig iron twenty times, and steel production 28 times, over the twenty-year-period from 1931 to 1951, and looks forward to having a production capacity of 2.5 million tons within the not far distant future, President Getúlio Vargas disclosed in an address given at the inauguration of Volta Redonda's new, modern second blast furnace on February 20 last.

Economic Significance

The Brazilian Chief Executive also stressed the exchange-saving value of the new blast furnace, and pointed out that, though it had involved an expenditure of $25 million and Cr$500 million in Brazilian currency, it would provide economies in Brazil's importing budget of as much as $25 million yearly.

He drew a graphic picture of Brazil's progress in the iron and steel field since the beginning of his first administration, and stressed the successful outcome of a series of long-term government measures taken at that time to aid and encourage the iron and steel industry.

Other Developments Cited

Though Volta Redonda is Brazil's (and Latin America's) largest steel mill, note was also taken of five other large-scale iron and steel developments now in their final stages or in advanced phases of planning, with a total capacity of about 640,000 tons yearly.

Sparks Heavy Industry

General Sylvio Raulino de Oliveira, president of the National Steel Company, in a speech welcoming President Vargas, drew the attention of his audience to Volta Redonda's vital rôle in sparking the growth of heavy industry in Brazil, and encouraging the development of many other industries especially in the chemical and pharmaceutical field.

Significant passages from the two speeches follow:

President Vargas Speaks

"Once again I derive from the contemplation of this portentous development, ... that same stimulation and confidence in the future of Brazil that the spectacle of Volta Redonda constantly renews in me.

"The success of this undertaking in the field of heavy industry emboldens our pride in the growth of Brazil and its increasing economic independence.

"The conclusion of the first expansion program of this mighty project is truly a triumph.

Monument Inaugurated

"It was in a spirit of justice on your part that you decided to mark this auspicious day by laying the foundation stone of the Monument to the Creator of Volta Redonda (statue of President Getúlio Vargas, commemorating his establishment of the steel mill during his first administration) to mark my earnest efforts in founding and my faith in executing this outstanding project, which is, above all, a product of your own efforts.

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OPPORTUNITIES IN BRAZILIAN TRADE

The Brazilian Government Trade Bureau has received the following inquiries from businessmen in Brazil, who desire to export or import the products listed below. These inquiries are published as received and no representation is made as to standings of listed firms. We suggest that the parties interested write directly to these firms, via airmail, as well as to this office, at 551 Fifth Avenue, New York 17, N. Y.

BUYERS WANTED

EMETINE HYDROCHLORIDE USP XIV. Extracted from Mato Grosso Ipecac Root. Large quantities available. Laboratórios Silva Araujo-Roussel, S.A., 262 Avenida Beira-Mar, Rio de Janeiro, Brazil.

SEMI-PRECIOUS STONES, such as **TURMALINES, AQUAMARINES, TOPAZ; ORNAMENTAL FEATHERS; HANDICRAFTS** and **CURIOS** from the **INDIGENOUS POPULATION; TROPICAL FISH** for **AQUARIUMS;** (including **ELECTRICEELS**); **SONG-BIRDS, PLUMAGE BIRDS,** and **OTHER COLLECTORS' LIVESTOCK.** Álvaro de Souza, Rua Rodrigo Silva 18, Sala 802, Rio de Janeiro, Brazil.

SECTIONAL BAMBOO FISHING RODS. Fábrica de Varas para Pesca "JAÚ", Caixa Postal 57, Jaú, Estado de São Paulo, Brazil.

TAPIOCA FLOUR, SOYA BEANS, RICE. Cereais Rosito Ltda., Caixa Postal 2476, Pôrto Alegre, Rio Grande do Sul, Brazil.

ROUGH and PLANED PARANÁ PINEWOOD; PARANÁ PINE PLYWOOD; HARDWOODS, INCLUDING JACARANDÁ, CEREJEIRA, JEQUITIBÁ, SUCUPIRA, ANDIROBA, PEROBA DO CAMPO, etc. HARDWOOD PLYWOODS. Max Weinberger, Caixa Postal 6415, São Paulo, Brazil.

1" x 1" x 48" STICKS of PARANÁ PINE, (for making broom handles), in bundles of 100. Antônio Oliveira Caldas, Caixa Postal 566, Fortaleza, Ceará, Brazil.

COFFEE, CEREALS, HIDES, VEGETAL OILS, etc. Transcontinental Ltda., Caixa Postal 166, Uberaba, Minas Gerais, Brazil.

FLAGS, SPORTS GOODS, MEDALLIONS, SHIELDS, POSTCARDS, MAGAZINES, ETC., especially wall flags featuring famous Brazilian sights, such as Sugar Loaf, Maracanã Stadium, Corcovado, Copacabana, Rio Carnaval, Quitandinha, Terezópolis, Iguassú Falls, Rio Grande Gauchos, Ceará Sea-Going Rafts (Jangadas), Rio-Brasil Mercantil Ltda., Caixa Postal 4716, Rio de Janeiro, Brazil.

"TRADE OPPORTUNITIES"
for American firms

The Brazilian Government Trade Bureau also accepts advertisements from U.S. firms wishing to reach interested parties in Brazil in its weekly "BOLETIM AMERICANO", in Portuguese, widely distributed in Brazil. U.S. firms wishing to import Brazilian products and desiring to use these facilities are invited to write to: Brazilian Government Trade Bureau, 551 Fifth Avenue, New York, New York.

MICA, MEDICINAL PLANTS, PAINA and other Brazilian products. Lourdes dos Santos, Caixa Postal 62, Belo Horizonte, Minas Gerais, Brazil.

SISAL FIBERS. Medeiros & Irmão Caixa Postal 107, João Pessôa, Paraíba, Brazil.

FRESH BANANAS. Alvaro de Mendonça Borba, Rua Sete de Abril 252, 3.°, sala 34, São Paulo, Brazil.

MANIÇOBA CRÊPE RUBBER, TEA, HERVA MATE, MICA, CRYSTALLIZED MENTHOL. José Kaselkovitz, Rua Guaicurús 1303, São Paulo, Brazil.

DRIED BANANAS. Representações SINGOR Ltda., Caixa Postal 1343, Pôrto Alegre, Rio Grande do Sul, Brazil.

RICE, BABASSÚ KERNELS, CORN, CASHEW NUTS, TAPIOCA FLOUR, RICE MEAL, COTTONSEED OIL, BABASSÚ OIL, COTTON WASTE. Ruy Abreu & Cia., Caixa Postal 79, São Luiz, Maranhão, Brazil.

MICA, about 500 tons, in blocks. Natércio Maia, Rua Saldanha da Gama 58, Bairro do Roger, João Pessôa, Paraíba, Brazil.

TAPIOCA WHITE FLOUR, MANGROVE BARK. Salma Chear Hiluy, Caixa Postal 227, São Luiz, Maranhão, Brazil.

CASTOR SEED, VEGETAL OILS, ESSENTIAL OILS, BABASSÚ KERNELS, BRAZIL NUTS, FIBERS. Brasmatéria, Rua Visconde de Inhaúma 134, salas 927-28, Rio de Janeiro, Brazil.

TAPIOCA FLOUR. Furtado & Dourado Ltda., Caixa Postal 124, Rio Grande, Rio Grande do Sul, Brazil.

TAPIOCA FLOUR and other CEREAL products. Custódio Apolonio da Rosa, Caixa Postal 44, Laguna, Santa Catarina, Brazil.

CARNAUBA WAX, URICURI WAX, SISAL FIBER, VEGETAL and ESSENTIAL OILS, BOTANICAL DRUGS, BRAZIL NUTS, A. Brickman & Cia., Ltda., Caixa Postal 2212, Rio de Janeiro, Brazil.

PRECIOUS STONES. Adolf A. Milch, Avenida Rio Branco 151, S. 1109, Rio de Janeiro.

SELLERS WANTED

ROUND IRON BARS for building purposes, in 10 and 12 meter lengths, bent double, diameters 3/16", 1/4", 5/16", 3/8", and 1/2", Berretta & Cia., Ltda., Caixa Postal 377, Florianópolis, Santa Catarina, Brazil.

FORD AUTOMOBILES, eight-cylinder, four-door, 1948 model. Iremar Villarim Meira, Caixa Postal 80, Campina Grande, Paraíba, Brazil.

Complete industrial installation for processing and drying of quartz sand to produce special sands for the glass, lithographical and abrasives industries and foundries. Production capacity 100 to 150 tons of finished product per 10 hour day. Cocito Irmãos Técnica e Comercial, S.A., Rua Florêncio Abreu 36, 2.°, São Paulo, Brazil.

HABERDASHERY in general. Specialized dealers in the line wish to receive catalogues from manufacturers or exclusive exporters. Soc. Com. Pedrosa da Fonseca, Ltda., Rua do Rangel 140, Recife, Pernambuco, Brazil.

AUTOMOBILES, HOUSEHOLD REFRIGERATORS, BICYCLES, GALVANIZED SHEETS, FLAKE CAUSTIC SODA, "K" TYPE PITCH, etc. Claudio da Silva Rocha, Caixa Postal 4204, Santos, São Paulo, Brazil.

U. S. manufacturers of exclusive exporters of **CHEMICAL PRODUCTS** for **TEXTILE, LEATHER, SOAP, SUGAR, FOOD PRODUCTS** and **OTHER INACCESSORIES; HAND TOOLS; GALDUSTRIES; AUTOMOBILE PARTS** and **VANIZED STEEL SHEETS; SMOOTH** and **BARBED WIRE,** etc., are offered exclusive repreesntation for North-East Brazil by Irmãos Julião Ltda., Caixa Postal 1187, Recife, Parnambuco, Brazil.

TRACTORS, DIESEL TRUCKS and JEEPS. Irmãos Iochpe, S. A., Caixa Postal 1870, Pôrto Alegre, Rio Grande do Sul, Brazil.

REPRESENTATIVES

U. S. manufacturers and exclusive exporters of **MOTORS, GENERATOR SETS, MACHINERY** in general, **TYPEWRITERS** and **CALCULATING MACHINES, BUILDING MATERIAL, CEMENT, IRON AND STEEL SHEETS, BARS, SMOOTH AND BARBED WIRE, CHEMICAL PRODUCTS** (especially **CAUSTIC SODA), PHARMACEUTICAL PRODUCTS, PARTS** and **ACCESSORIES** for **AUTOMOBILES** and **TRUCKS,** and **BLACK AND GALVANIZED TUBES,** are offered exclusive representation by Organização Mercanti Ltda., Caixa Postal 930, Fortaleza, Ceará, Brazil.

U. S. manufacturers and exclusive exporters are offered exclusive representation for the North-East of Brazil by Leon Guedes Corrêa, Rua do Imperador 482, 1.° andar, Recife, Pernambuco, Brazil.

MISCELLANEOUS

Brazilian proprietors of large agricultural property in the interior of the state of Bahia, well located, with outcroppings of industrial minerals, including mica and talc, also quartz crystal, tourmaline, etc., accepts technical participation and capital to establish company for development of mineral wealth. Further information from: Mr. Gustavo Procópio Ferreira, Caixa Postal 160, Salvador, Bahia, Brazil.